

LAWRENCE LIVERMORE NATIONAL LABORATORY
WASTE DISPOSAL REQUISITION
Waste Run Date:

1. Label/Waste Type: (Must check) <input type="checkbox"/> Non-Haz <input type="checkbox"/> Haz <input type="checkbox"/> Low-Level <input type="checkbox"/> TRU		RCRA <input type="checkbox"/> CA <input type="checkbox"/>		W		2. Container Serial Number or Retention Tank ID: LL 85		3. For TRU Waste, TRU Waste Container Serial No.: TRU		4. Container Acceptable: <input type="checkbox"/> Yes <input type="checkbox"/> N/A Initials: _____		Chemical Compatibility Code:		Storage Restrictions <input type="checkbox"/> No Storage Restrictions Not acceptable at the following locations: <input type="checkbox"/> 233 <input type="checkbox"/> 514 <input type="checkbox"/> 612 <input type="checkbox"/> 693 CWA <input type="checkbox"/> 169 <input type="checkbox"/> 361 <input type="checkbox"/> 612-4																																																													
		<input type="checkbox"/> No Disposal Option																																																																									
5. Building No.:		6. Room No.:		7. RMMA: <input type="checkbox"/> Yes <input type="checkbox"/> No		8. WAA No.:		15. Waste Package Seals Applied: <input type="checkbox"/> Yes <input type="checkbox"/> N/A (if yes, complete Step 16)		19. Hazardous Properties: <input type="checkbox"/> Toxic <input type="checkbox"/> Corrosive <input type="checkbox"/> Ignitable <input type="checkbox"/> Reactive 20. Waste Form: <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Sludge		21. Outer Container Type: <input type="checkbox"/> Box <input type="checkbox"/> Sack <input type="checkbox"/> Can <input type="checkbox"/> SWB <input type="checkbox"/> Carboy <input type="checkbox"/> Tub <input type="checkbox"/> Drum <input type="checkbox"/> Tank - Fixed <input type="checkbox"/> Tank - Portable <input type="checkbox"/> Transportainer		22. Outer Container Size/Vol: <input type="checkbox"/> 1 gal <input type="checkbox"/> 750 gal <input type="checkbox"/> 2 gal <input type="checkbox"/> 1000 gal <input type="checkbox"/> 5 gal <input type="checkbox"/> 5000 gal <input type="checkbox"/> 30 gal <input type="checkbox"/> 67 cu ft <input type="checkbox"/> 55 gal <input type="checkbox"/> 1 x 1 x 1.5 <input type="checkbox"/> 85 gal <input type="checkbox"/> 2 x 4 x 7 <input type="checkbox"/> 330 gal <input type="checkbox"/> 4 x 4 x 7 <input type="checkbox"/> 660 gal <input type="checkbox"/> gal <input type="checkbox"/> cu ft																																																													
9. Workplace Start Date: ____/____/____		10. Workplace End Date: ____/____/____		11. Account No.: _____		12. Directorate: _____		16. Waste Package Seal Nos.: _____ _____ _____								17. Source Code: <input type="checkbox"/> Lab Pack <input type="checkbox"/> Over Pack		18. LLW Waste Stream No. or TRU Waste Form No.: _____																																																									
13. Did Waste Minimization Effort Practices Begin in Current Calendar Year? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, enter Activity Code: W _____				14. WEF/PKE/SAW No.: <input type="checkbox"/> WEF No. _____ <input type="checkbox"/> PKE No. <input type="checkbox"/> SAW No. <input type="checkbox"/> N/A Specify: _____				Comments: _____																																																																			
23. Item No.	24. Spent or Unused (S/U)	25. Organic or Inorganic (O/I)	26. Waste Form (s, sl, l, g)	27. Waste Description (For multiple parcels, also list Parcel Card Nos.)				28. Hazardous Constituents and Concentrations				29. Item Container Size	30. Quantity per Item Amount Units		31. Analysis Sample No.	Physical Waste Data: 32. Aqueous Only pH Normality 33. Flash Point																																																											
34. Does the waste contain radioactive components? (If yes, complete Steps 38-43 as applicable to waste type.) <input type="checkbox"/> Yes <input type="checkbox"/> No This section (Steps 35-37) is required for Hazardous Waste generated in a RMMA 35. Was the waste kept isolated from any operation that could have produced radioactive contamination (using a glove box, vent hood, etc.)? <input type="checkbox"/> Yes <input type="checkbox"/> No (If no, full rad analysis required) 36. Was the waste exposed to particle beams capable of inducing radioactivity by activation? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, full rad analysis required) 37. Describe other controls used to prevent radioactive contamination: _____ _____ _____		38. Radionuclides: Check all Plutonium grades present: <input type="checkbox"/> Weapons <input type="checkbox"/> Fuel <input type="checkbox"/> Reactor <input type="checkbox"/> Am-enriched <input type="checkbox"/> Mixed Check all Uranium grades present: <input type="checkbox"/> Depleted <input type="checkbox"/> Natural <input type="checkbox"/> Enriched _____%234 _____%235 _____%238 (List additional radionuclides in Step 38.) 39. Gross weight of waste package: _____		40. Radiological Data: (For certified LLW and TRU waste, list totals from Parcel Cards.) <table border="1" style="width:100%; border-collapse: collapse;"><thead><tr><th>Item</th><th>Radionuclide(s)</th><th>Quantity</th><th>Units/Activity (Ci/g)</th><th>PE - CI</th><th>Fissile g</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>												Item	Radionuclide(s)	Quantity	Units/Activity (Ci/g)	PE - CI	Fissile g																																																						
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41. Rad. Survey mR/hr: _____ β - γ @ Contact β - γ @ 1 Meter Neutron @ Contact 42. Swipe Data: <input type="checkbox"/> Complies with 10 CFR 835 criteria for unrestricted release 43. Rad Swipe/Survey Performed By: (Print Name-Last, First) _____ Employee No.: _____ L-Code: _____ Signature: _____ Date: _____ Ext.: _____																																																																											
RMMA Certification: Shipping CC		RSDR #:		Tare weight of container:		44. Generator: I certify, to the best of my knowledge, that the information provided on this requisition is correct. I understand that I may be liable to State and Federal prosecution by intentionally providing false information. <input type="checkbox"/> Container Custodian: I certify that the waste parcels identified on this form are contained in this waste container and have been packaged in accordance with the requirements specified in the appropriate LLNL TRU Waste or Low-Level Waste Program Certification and Quality Assurance Program. Generator or Container Custodian Name (Print - Last, First): _____ Signature: _____ Employee No.: _____ L-Code: _____ Ext.: _____ Date: _____ Inspected By (Print Name - Last, First): _____ Ext.: _____ Signature: _____ Employee No.: _____ Date: _____ Characterization Chemist Approval <input type="checkbox"/> N/A (Initials) <input type="checkbox"/> WEF Signature: _____ Employee No.: _____ Date: _____ RCA Approval <input type="checkbox"/> WEF <input type="checkbox"/> N/A (Initials) <input type="checkbox"/> NTS Certified (Initials) <input type="checkbox"/> WIPP Certified (Initials) Signature: _____ Employee No.: _____ Date: _____ HWM Use Only <input type="checkbox"/> Weight Dependent <input type="checkbox"/> LL-5344 (Rev. 06/97) Page 1 of 1																																																																					

B-5

August 1997

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Generator: Complete items 45 - 49, only if container contains a single parcel of solid radioactive waste, and there is no Parcel Card attached.

45. Waste Generating Procedure: Procedure #: <input type="checkbox"/> 332 FSP <input type="checkbox"/> B-360 Complex FSP <input type="checkbox"/> 331 FSP <input type="checkbox"/> AVUS HPP <input type="checkbox"/> EX-404 <input type="checkbox"/> _____ <input type="checkbox"/> SAP #: _____ <input type="checkbox"/> Instruction # _____		48. Will the final waste form contain any of the following? (Explain all "yes" answers)	
46. Method(s) used to identify radionuclides and/or determine activity: (Check all that apply) <input type="checkbox"/> Process knowledge <input type="checkbox"/> Mass <input type="checkbox"/> Mass balance <input type="checkbox"/> Alpha spectrometry <input type="checkbox"/> Gamma spectrometry <input type="checkbox"/> Liquid scintillation counting <input type="checkbox"/> AVUS method (<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C) <input type="checkbox"/> Tritium off gas measurement (attach results) <input type="checkbox"/> High Sensitivity Neutron Instrument (attach results) <input type="checkbox"/> Other _____		Chelating Agents: <input type="checkbox"/> Yes <input type="checkbox"/> No (e.g., Radiac Wash, > 1% by weight / pkg) Explosives: <input type="checkbox"/> Yes <input type="checkbox"/> No (e.g., TNT, PETN, HMX, that exhibit explosive properties) Free Liquids: <input type="checkbox"/> Yes <input type="checkbox"/> No Fine Particles: <input type="checkbox"/> Yes <input type="checkbox"/> No (> 1% of <10-micrometer particles (compare to flour) or >15% of <200-micrometer particles (compare to sand)) Classified Material: <input type="checkbox"/> Yes <input type="checkbox"/> No Friable Asbestos: <input type="checkbox"/> Yes <input type="checkbox"/> No Compressed Gases: <input type="checkbox"/> Yes <input type="checkbox"/> No (e.g., non-punctured aerosol cans) PCBs: <input type="checkbox"/> Yes <input type="checkbox"/> No Pyrophorics: <input type="checkbox"/> Yes <input type="checkbox"/> No (e.g., uranium turnings that could spontaneously combust if exposed to air) Explanations: _____	
47. Total Parcel Weight (g, lb): Note: If AVUS Method C, mass or mass balance is used, use a calibrated scale. _____ Units <input type="checkbox"/> Scale: Serial #: _____ Calibration due date: _____ <input type="checkbox"/> Estimated weight		49. Verifier Certification: I verify that, to the best of my knowledge, the information supplied by the waste generator on this form is complete and accurate. Verifier Name (Print): _____ Verification Date: _____ Signature: _____ Employee No.: _____	

Hazardous Appendix HWM-801 Review SCIL (Single Container Inventory Limits) Exceeded <input type="checkbox"/> No <input type="checkbox"/> Yes pH Results obtained by: (Check all that apply) <input type="checkbox"/> Meter (Calibrated) <input type="checkbox"/> Field Technician <input type="checkbox"/> Sample Team <input type="checkbox"/> Paper <input type="checkbox"/> Analytical <input type="checkbox"/> Chemist Initial: _____ CC Rule (VOC's greater or less than 500 ppm Level 1, 2, 3): <input type="checkbox"/> CC / > 500 / A <input type="checkbox"/> CC / < 500 / A <input type="checkbox"/> CC / > 500 / B <input type="checkbox"/> CC / < 500 / B A = Generator Knowledge B = Analytical Data Storage Locations: <input type="checkbox"/> No storage restrictions Waste is not acceptable for storage at the following locations: (Check all that apply) <input type="checkbox"/> 233 <input type="checkbox"/> 514 <input type="checkbox"/> 612 <input type="checkbox"/> Bldg. 693 <input type="checkbox"/> 169 CWAA <input type="checkbox"/> 361 CWAA <input type="checkbox"/> 612-4 CWAA <input type="checkbox"/> WEF CC initials: _____		Radiological Appendix HWM-800 Review Waste is not acceptable for storage at the following locations, based on SCAL: (Check all that apply) <input type="checkbox"/> No storage restrictions, based on Single Container Acceptable Limits. <input type="checkbox"/> 233 <input type="checkbox"/> 514 <input type="checkbox"/> 612-1 <input type="checkbox"/> 612 (other than 612-1) <input type="checkbox"/> Bldg. 693 <input type="checkbox"/> 169 CWAA <input type="checkbox"/> 361 CWAA <input type="checkbox"/> Contains > 1 curie and/or is > the amount identified per radionuclide on attachment B of Procedure HWM 800. <input type="checkbox"/> Contains > than 10 grams of fissile material (U-233, U-235, or Pu-239) <input type="checkbox"/> WEF RCA initials: _____ Scheduled Date: _____ TWMS: Initial: _____ Date: _____ <input type="checkbox"/> HWM Waste Run <input type="checkbox"/> Processed Waste <input type="checkbox"/> Site 300 to LLNL <input type="checkbox"/> Commercial Shipment <input type="checkbox"/> Secured Pickup <input type="checkbox"/> HWM Field Pump Out <input type="checkbox"/> HWM Generated Waste: Loc: _____	
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Item	RCH Prefix	P	Origin Code	Form Code	EPA No.	DTSC No.	MSDS No.	Hazardous Properties T C R
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
								<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Waste Disposal Requisition

INSTRUCTIONS

PLEASE PRINT – USE A **BLUE OR BLACK** INDELIBLE INK (NON-WATERBASED INK) PEN

USE A CONTINUATION FORM, IF ADDITIONAL SPACE IS NEEDED

BOLD BOXES ARE FOR HWM USE ONLY

TO MAKE CORRECTIONS – USE A SINGLE LINE TO CROSSOUT, THEN INITIAL AND DATE IT.

Note: All property numbered equipment MUST be retired from the property tracking system. Please fill out Property Management's "Property Number Item Retirement Form," in addition to this one for property numbered equipment that is contaminated with hazardous/radioactive materials. See your Property Center Representative for a copy of the form.

1. **Label/Waste Type** – Specify the type of waste represented by the requisition. Mark only **one** type of waste per requisition. This waste type should match the waste type identified on the container's label. For mixed waste and hazardous waste, check the RCRA and/or CA box.
2. **Container Serial Number or Retention Tank ID** – If the container has a barcode container QA serial number, document the serial number. If a Retention Tank, supply the ID number.
3. **TRU Waste Container Serial No.** – For TRU waste only, fill in the waste container serial number.
4. **Container Acceptable**– Check yes if the container is acceptable and initial. Acceptable containers are as follows:

Assure that all containers are compatible with the waste type.

For Hazardous Waste - Refer to Appendix A of the EPD HWM Waste Acceptance Criteria.

For LL and TRU waste, assure that the container has no holes, no bad seams or welds, no significant rust (rust that flakes off is unacceptable, rust that wipes off is acceptable), no other defects are present and that there is an intact, non-deformed gasket on the lid of the container. Also assure that the container is marked 55 GAL or 208 L, and 17C or UN1A2.

Additional requirements for TRU Waste Drums: Verify that a filter vent, a rigid plastic liner, a greater than or equal to 0.3 inch vent hole in the liner lid is present, and that there are no liner defects. Also verify that there is a greater than or equal to 0.0035 inch plastic liner bag is present.

Additional requirements for TRU Waste Boxes: Verify the box is a TRUPACT-II Standard Waste Box (SWB) and that the box contains two filter vents and two plugs.

Additional requirements for Transportainers: Verify that there are no dents or bends on any surface of the main structure greater than or equal to 3/4 inch in depth and that there are no more than two splices per bottom or top side rail. Verify that the doors are in working condition, that they contain locking rods, locking cams, handles, handle retainers, hinges, a gasket, no holes, and that they close properly. Verify that the interior floors are not warped and fasteners are not corroded. Assure that there is no visible light inside when the doors are closed. Verify that the vents have been removed and the holes have been repaired or covered.

5. **Building No.** – Enter the building number where waste was generated.
6. **Room** – Enter the room number where waste was generated. If waste was generated outside a room (cell, area, yard) provide the appropriate numbers, letters, or other identification (e.g., Yard SW of B-XXX, Tank from B-XXX). For TRU and LLW when more than one room number is identified on parcel cards, write down the room that has the most waste in the container.
7. **MA** – Indicate whether or not waste is from a MA (Radioactive Materials Management Area). If in doubt, call your Health and Safety (H&S) Technician. If waste is hazardous or non-hazardous and if this box is marked yes, complete Items 35 -37.
8. **WAA No.** – Enter the Waste Accumulation Area (WAA) number where waste is to be picked up.
9. **Workplace Start Date** – Enter the date waste was first added to the container.

10. **Workplace End Date** – Enter the date container is secured. (The container must immediately be secured once a container is filled or, for hazardous/mixed waste, the 9 month workplace accumulation time limit is reached.) If the waste is (will be) under RMMA status and the room status was changed, the container must be closed and sealed on the effective day of the change. Match the Workplace End Date listed on container label. (Hazardous/mixed waste must be moved to a WAA within 3 days.)
11. **Account No.** – Enter the VALID account number for the dept./program that generated the waste.
12. **Directorate** – Fill-in the appropriate 2 or 3 letter abbreviation representing the directorate that generated the waste. If the program who generated the waste is not known, contact the Program Manager for correct directorate abbreviation. For the latest list of directorates abbreviations, refer to the Environmental Protection Department Waste Acceptance Criteria (WAC).

BBR	Biology and Biological Technology Research Program	NAI	Nonproliferation/Arms Control/International Security
CMP	Computations	NRG	Energy
CMS	Chemistry and Material Science	NTE	Nuclear Test Experimental Science
DIR	Director's Office	PHY	Physics and Environmental Sciences
DSN	Defense Systems/Nuclear Design	PLT	Plant Operations
ENG	Engineering	SPP	Special Projects
LAS	Lasers		

13. **Waste Minimization Efforts** – Indicate whether or not the waste minimization effort commenced during the current calendar year. If yes, fill in waste minimization activity code. Refer to the EPD WAC for the list of codes. Use the comment line for activity codes that state: "Specify in Comments". If no new activity commenced, please indicate "no".
14. **WEF/PKE/SAW No.** – If your waste has an approved Profile Number, Process Knowledge Evaluation (PKE) Number, or Sampling and Analysis Worksheet (SAW) Number, mark the appropriate box and specify the number where indicated. If the waste stream has no number, mark N/A.
15. **Waste Package Seals Applied** – For Low-Level and TRU certified waste only, specify whether waste package seal(s) have been applied to the container.
16. **Waste Package Seal Nos.** – For Low-Level and TRU certified waste only, list the numbers of the waste package seals that have been applied to the container.
17. **Source Code** – Fill-in the appropriate 4-digit source code that best describe how your waste was generated. Refer to the EPD WAC for the list of codes. NOTE: Some numbers in the source code list have changed.
18. **LLW Waste Stream No. or TRU Waste Form No.** – For Low-Level Waste, list the waste stream number associated with the waste (obtain from the Low-Level Waste Stream Evaluation Form or the Packaging Instructions). For TRU waste, list the waste form number(s) describing the waste (e.g., No 1 - Glove Box Waste; No. 2a - Solidified Liquids, oil or solvents present; No. 2b - Solidified Liquids, aqueous only; No. 3 - Metal Scrap Waste; No. 4a - Waste Salt Blocks, plastic/organics present; No. 4b - Waste Salt Blocks, organics absent; No. 5 - HEPA Filters).
19. **Hazardous Properties** – Check the box(es) that describe potential hazards associated with waste. Hazardous properties must match those marked on the label. If waste is rad only or non-hazardous, the hazardous properties box should be blank.
20. **Waste Form** – Check the box that best describes the physical form of the waste. The waste form must match the waste label.
21. **Outer Container Type** – Check the box that describes the **outermost** container. If "Other" is used, specify the type of container (e.g., for plastic wrapped equipment, specify pallet if the waste is on a pallet).
22. **Outer Container Size** – Check the box that describes volume capacity of the **outermost** container. If "Other" is used, indicate the volume and appropriate units.

23. **Item No.** – For hazardous waste, sequentially number each item in the waste container. Multiple or identical items in an overpack container are assigned unique item numbers. Using a permanent marker, physically number the individual waste items in the container to match the item numbers on the requisition. If more than six items, please use continuation form. **Not required for TRUW or solid LLW.**
24. **Spent or Unused** – For hazardous waste, enter an **S** for waste that is spent/used. Enter a **U** for waste containing unused products (e.g. out-of-date chemicals). **Not required for TRUW or solid LLW.**
25. **Organic or Inorganic** – For hazardous waste, enter an **O** for organic waste. Enter an **I** for inorganic waste. **Not required for TRUW or solid LLW.**
 - organic ($\geq 10\%$ organics)
 - inorganic ($< 10\%$ organics)
26. **Waste Form** – For hazardous waste, enter an **S** for solid waste, **L** for liquid waste, **G** for gaseous waste, **SL** for sludge. **Not required for TRUW or solid LLW.**

When completing Steps 27 - 33:

Attach any analytical or supporting data (e.g., MSDS) to the requisition, as appropriate. Implement the following, as necessary: (These may not be applicable to radioactive only waste.)

- All waste must be characterized (e.g., oils must have flash point, PCB, VHS and % H₂O performed). If concentration or percentage of the container constituents are not known, submit a waste sample for analysis.
 - Terms such as mg/l, mg/kg, grams, or % shall be used.
 - MSDSs are required for unused products.
 - HWM cannot accept unknowns. For advice contact your Environmental Analyst.
27. **Waste Description** – ABBREVIATIONS ARE **NOT** ALLOWED (e.g., Al for aluminum, SS for Stainless Steel)

For solid LLW, TRUW and TRUMW list the parcel card numbers. If there is no parcel card or fill record attached, give a complete description of the waste (e.g., kimwipes, glass, stainless steel sheet)

For hazardous, mixed waste and liquid LLW, complete the following three parts:

- (1) Enter the generator's description of the waste (e.g. vacuum pump oil, lab debris, aqueous photochemical solution, spray paint aerosol cans, Trimsol coolant wash water, mixed solvents, HEPA filters, Safety Kleen 105, etc.)
- (2) Enter the waste's matrix and percentage, such as 50% stainless steel and 15% glass or 90% water or 90–100% wood or 50% paper, 25% plastic, and 10% sand or 100% asbestos. More than one material may be needed to describe a waste's matrix. The sum of a waste's matrix plus hazardous components should not exceed 100%.
- (3) List the name of the manufacturer, if available.

For guidance on proper generic identification, call the Chemist Review Office (ext. 3-6059 or ext. 2-8834).

28. **Hazardous Constituents** – List components that make the waste hazardous and their concentrations in descending order. Major components that contribute to the hazardous properties should be consistent with those listed on the waste label. The waste's matrix description in box 25 may be omitted when it matches listed **Hazardous Constituents**. No chemical structures or formulas may be used. For TRUMW, list the hazardous constituents described on the parcel cards and the total quantity of each in item 28.
29. **Item Container Size** - Enter the size of the container by item number (e.g., 1 gallon, 1 quart, etc.) This field is for labpack and overpacks only. **Not required for TRUW or solid LLW.**

30. **Quantity per Item** –

Amount – Enter the weight of solids, or the volume of liquids per *each* waste item. Enter the amount of waste actually contained not including the container weight. This may be the same as the outer container size.

Units – Enter the matching unit to weight or volume. Acceptable units are:

Weight: grams, kilograms, pounds, tons (2000 lb)

Volumetric: liters, milliliters, gallons (US), cubic feet

31. **Analysis Sample No.** – Use the Chemistry and Environmental Services (CES) sample number, if applicable.

32. **Aqueous Only** – (if necessary call your HWM Field Technician/Technologist or Environmental Analyst for assistance)

pH – Enter the pH of your aqueous waste (pH paper is adequate for the range of 3-10; use a meter for readings that are <3 or >10). For non-hazardous waste, pH must be in the range from 4 to 10.

Normality – Enter the normality of your aqueous waste if the pH is ≤ 2.0 or ≥ 12.5 . Normality may be determined by CES analysis or if calculated, please indicate if by method used.

33. **Flash point** – For liquids, if available, enter the flash point of the waste. The flash point shall be obtained from analytical, MSDS, and/or supporting data. For non-hazardous waste, flashpoint must be above 60°C. Flash point must be documented in centigrade.

34. **Radioactive Status** – For all waste, answer the question. If you answer "YES", complete steps 38 through 43, as applicable. If you answer "NO" and the waste was generated in a RMMA (i.e., step 6 is "YES"), complete steps 35 through 37.

Items 35-37 are completed for **RMMA Waste** – For hazardous waste generated in a RMMA, answer the questions. (If wastes are not from a RMMA or are already designated as radioactive/mixed, skip these questions.)

If you answered "NO" in Step 35 and/or "Yes" in Step 36, submit a sample for radiological analysis. Full radiological analysis includes gross alpha, gross beta, (gamma spectrum if gross alpha or beta exceeds the limit of sensitivity for the instrument), and a tritium analysis. Contact the CES Laboratory (ext. 4-4127). If waste is determined to be radioactive, complete steps 38 through 43, as applicable, and change the label/designation on the requisition and the label on the container to match the waste description.

38. **Radionuclides** – For TRU or Low-Level waste containing Uranium or Plutonium, check the appropriate boxes to indicate grades of Plutonium and Uranium present.

39. **Gross Weight of Waste Package** - Specify the gross weight of package.

40. **Radiological Data** – For containers containing multiple items, enter the matching item number (see Step 23), radionuclide, total quantity per item and units for each radionuclide. For Low-Level and TRU certified waste, put a "T" (for total) under "item" and list the total of other radionuclides from the parcel cards. If the entire waste package has been assayed, put an "A" (for assayed) under "item" and list the radionuclides assayed and their quantity. The listed grade(s) will be used by HWM to calculate the other radionuclides in the grade of Plutonium and Uranium. For example:

Item	Radionuclide(s)	Quantity	Units/Activity
A	Pu-239	2.731	nano Ci
A	Pu-238	< 0.01	micro Ci
T	Dep. U	30	kg

NOTE:
depleted uranium = Dep U
natural uranium = Nat U
D-38 is not acceptable

NOTE: Units of concentration (e.g., micro Ci/liter, micro Ci/gram) are not acceptable. Write out the prefix for the units of curies (e.g., micro Ci). Acceptable activity units are: nano Ci, micro Ci, milli Ci, Ci. Grams and kilograms are also acceptable.

41. **Radiation Survey** – NOTE: Surveys are to be conducted by H&S Technician or qualified HWM Technician. Enter meter survey result(s) for radiation in appropriate box(es). For dose rates, state the maximum measured dose rates measured at surface contact and 1 meter from the external surface of the container. Express the dose rates in millirem/hour. Use N/A for radiation types that are not applicable. If reading is at background, enter the background value.
42. **Swipe Survey** – NOTE: Surveys are to be conducted by H&S Technician or qualified HWM Technician. Check the box to signify that the swipe date complies with 10 CFR 835 criteria for unrestricted release of items. See your Health Physicist if you need assistance.
43. **Radiological Survey Signature** – Name, employee number, mail stop (L-code), signature, date and phone extension number of the H&S Technician who performed the radiological survey.
44. **Generator or Container Custodian Signature** – For Low-Level and TRU certified waste, the Container Custodian certifies that the waste parcels identified on the form are contained in the waste container and the waste has been packaged in accordance with requirements. NOTE: Each parcel card listed is signed by the Generator. For all other waste, the Generator certifies to the best of his/her knowledge that the information provided on the requisition is correct. Enter name, employee number, mail stop (L-code), signature, date and phone extension number to document this certification.

Items 43 - 47, are to be completed only if container contains a single parcel of solid radioactive waste, and there is no Parcel Card.

45. **Waste Generating Procedure** – Identify the appropriate procedure #, packaging instructions #, or sampling and analysis plan # (SAW #).
46. **Method used to identify radionuclides and/or determine activity:** (*Check all that apply*) – Identify the method used to determine the radionuclide(s) present and the method used to determine the activity of the radionuclide(s). (e.g., If Process Knowledge was used to determine the radionuclide, and mass was used to determine the activity, check both boxes)
47. **Total Parcel Weight** – List the net weight of the parcel. Identify if this is an estimated weight or if a calibrated scale was used. NOTE: If AVLIS Method C, or mass is used to determine the activity of the waste then a calibrated scale must be used.
48. **Final Waste Form** – Supply information on whether the waste contains any of the listed materials relating to various disposal facilities' waste acceptance criteria. If you answer yes to any of the materials, explain its presence in the space provided.
49. **Verifier Certification** – The waste verifier reviews the information the generator provided and signs the verifier certification, if the information is complete and accurate to the best of their knowledge. The verifier also provides the verification date, and his or her employee number.

When complete give the WDR to the HWM Field Technician for processing.

Instructions for completing the HWM Use Only boxes -

No Disposal Option is to be checked when there is no known disposal option for the waste.

Chemical Compatibility Code: Is to be completed by the Characterization Chemist (CC). The RCA may complete for Dry Solids.

Storage Restrictions: This is completed once the RCA and CC have both completed the Appendixes on the back of the WDR. The final person to review the WDR is to complete this section.

Lab Pack/Over Pack: If the waste in the container is a lab pack or over pack, check the appropriate box; if the waste is not a lab pack or over pack leave blank. Lab pack is multiple waste items packaged together for offsite shipment. Over pack is multiple waste items packaged together for onsite transfer.

RMMA Certification: Is to be completed by the Shipping Coordinator.

RSDR #: Is to be filled in by the individual who send the waste to sewer via an RSDR.

Tare Weight of container: is to be filled in by the HWM Field Tech for TRU and LL Waste.

PE - Ci (plutonium equivalent curies) is to be completed by the RCA. This is only applicable to TRU Waste.

Fissile g is to be completed by the RCA whenever the waste contains U-233, U-235 and/or Pu-239.

Inspected By: Is to be completed by an HWM representative. This person is to assure that all documentation and waste is acceptable in accordance with the EPD WAC.

Characterization Chemist Approval: The HWM Characterization Chemist reviews the waste against Procedure HWM 801 for acceptance into the applicable storage location, and completes the Hazardous Appendix on the back page, if waste is acceptable, sign and date. The N/A box is to be checked and initialed by an RCA, when the waste is rad only, and there is an approved PKE. The WEF box is to be checked when the waste is WEFed and the Chemist review is not required.

RCA Approval: The HWM RCA reviews the waste against Procedure HWM 800 for acceptance into the applicable storage facility. If the waste meets the NTS WAC, checks that the waste is NTS Certified and initials. If the waste meets the WIPP WAC, checks that the waste is WIPP Certified and initials. Complete the Radiological Appendix; if waste is acceptable sign and date. The N/A box is to be checked and initialed by a Characterization Chemist when the waste is hazardous or non-hazardous only. The WEF box is to be checked when the waste is WEFed and the RCA review is not required.

**Points to remember
when filling out the
WDR**

Here are some reminders to assist you in filling out the WDR:

- **Box 1, Label/Waste Type** – Mark the one box, *Radioactive or Mixed* to describe your waste. In addition, mark *TRU*.
 - **Box 11, Account No., and Box 12, Directorate** – For assistance with Box 10 *Account No.* and Box 11, *Directorate*, call 3-0219 or use Assist. The information in Assist is updated once a month.
 - **Box 13, Waste Minimization** – Box 13, *Waste Minimization* must be filled in. If no waste min activity was practiced you must mark the box **no**.
 - **Box 17, Source Code** – For the *Source Code*, enter it in Box 17; there have been some changes in the numbers and descriptions. Your field tech can help.
 - **Box 22, Outer Container Type** – In Box 22 record the size of the *Outer Container* in which the waste is packed. Only “55 gal” (for a drum or “67 cu ft” (for TRUPACT-II Standard Waste Box) are allowed for TRU waste.
 - **Box 27, Waste Description** – In *Waste Description*, Box 25, list the parcel card numbers. You may list more than one per line.
 - **Box 38, Radiological Data** – For TRU and Mixed Waste, list radionuclides in Box 38, *Radiological Data*, **not** in Box 28 under *Hazardous Constituents*.
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